ON A NEW SPECIES OF ARDISIA FROM NEW SOUTH WALES.

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(Plate xvi.)

Ardisia racemosa, sp.nov.

A handsome, glabrous tree about 20 to 30 feet high, and 6 to 9 inches in diameter, with a smooth grey bark. It is found in deep, rich alluvial gullies, generally in groves or clusters similar to Drimys dipetala and D. aromatica. Branchlets terete. measuring up to 5 inches long and 1 inch wide, ovate-elliptical, acuminate, thin, almost membranous, pale-coloured on the underside, often becoming channelled near the midrib when dried; edges very slightly crenate, and in parts are sometimes undulate. Lateral veins fine, oblique. Oil glands numerous, fairly distinct. Flowers in short, axillary, occasionally lateral loose racemes; pedicels filiform, about 4 lines long. Sepals 5, valvate, about 1 line long, acuminate, marked (except the edges), with dark purple spots, glabrous, edges scarious. Petals 5, about 11 lines long, imbricated and contorted in the bud, acuminate, glabrous, spotted similarly to the sepals, edges lightcoloured or not marked, the lower half of the inner surface covered with dense ferruginous hairs. Filaments exceedingly short. Stamens opposite the petals. Anthers glabrous, sessile or nearly so, cordate-sagittate, with subulate recurved points: valves opening by longitudinal slits from apex to base. Style longer than the stamens, subulate. Fruits not seen.

Timber light-coloured, close-grained, moderately hard, but on account of its size could probably only be used for turning, tool handles, &c.

Hab.—Tumbulgum, on the Tweed River (W. Bäuerlen); in deep, rich gullies.

This tree was discovered by Mr. Bäuerlen in October, 1897, at the above-mentioned locality, where it is associated with other plants only recently added to the known flora of New South Wales, such as *Freycinetia excelsa*, F.v.M., *Petermannia cirrosa*, F.v.M., *Tecoma Baileyana*, Maiden and Baker, and other species.

It differs principally in the mode of inflorescence from the three species of Ardisia described from Australia. A. pseudo-jambosa, F.v.M., has comparatively large terminal panicles, often over six inches long, and with an induplicate-valvate corolla; small, shining sepals and petals, and well exserted anthers—characters that do not apply to this species.

A. brevipedata, F.v.M., differs from it in having flowers arranged in umbels on very short peduncles, and in having numerous flowers, with imbricate, broad and short sepals, and imbricate petals.

A. pachyrrhachis, F.v.M., differs from it in its thick rhachis, more numerous flowers (up to 40) in a fascicle, larger leaves and flowers.

Its nearest affinity is A. brevipedata, and in botanical sequence it might be placed between that species and pseudo-jambosa, F.v.M.

The leaves of all four species are very similar in texture and shape, and have minute, crenulate and repandulate edges, and all dry with a wrinkled surface.

The name A. repandula, F.v.M. (Frag. iv. 82), was attached to leaf specimens only, and was thought by Bentham (B.Fl. iv. p. 276) to be identical with A. brevipedata, F.v.M. No specimen of this species now appears to be available.

Baron von Mueller, in his 'Papuan Plants,' describes two Ardisias, A. solunacea var. haplosciadea, from a plant discovered by W. Bäuerlen on the Strickland River in 1885, and A. poranthera from a New Guinea plant cultivated in the Sydney Botanic Gardens.

In the 'Flora von Kaiser Wilhelms Land,' by K. Schuhmann, A. imperialis, collected by M. Hollrung, n. 256, is recorded. It is described (Eng. Jahrb. ix. 213) as a tree about 9 to 18 feet high, and with deep rose-coloured flowers.

These species are all distinct from the one now described from New South Wales.

I beg to thank Mr. J. G. Luehmann, F.L.S., Curator, National Herbarium, Victoria, for the use of his herbarium, and also Mr. Bäuerlen for assistance in working out this species.

EXPLANATION OF PLATE XVI.

Fig. 1.—Twig with leaves and inflorescence.

Fig. 2.-Bud.

Fig. 3.—Expanded flower showing disposition of anthers.

Fig. 4.—Expanded flower showing calyx.

Fig. 5.—Anther showing lateral opening of cell.

Fig. 6.—Anther, front view.

(All the figures except No. 1 enlarged.)